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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,559	01/26/2007	Franck Marandon	289351US0PCT	8180
22850 7590 05/21/2010 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER WIESE, NOAH S				
ART UNIT 1793		PAPER NUMBER		
NOTIFICATION DATE 05/21/2010		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/577,559

Applicant(s)

MARANDON, FRANCK

Examiner

NOAH S. WIESE

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-18 and 22-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-18 and 22-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Status of Application

1. Acknowledgement is made of amendments filed 02/24/2010. Upon entering the amendments, the claims 1-14 and 19-21 are cancelled, claims 22-45 are added, and claims 15-16 and 18 are amended.
2. The claims 15-18 and 22-45 are pending and presented for the examination.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 15-17 and 22-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forker, Jr. et al (US 4483700) in view of Craver (US 4817585).

Regarding **claims 15-16, 25, 27, 33, 35, 41, and 43**, Forker, Jr. et al (hereinafter "Forker") teaches a chemically strengthened glass that contains Na⁺ and/or K⁺ ions (see Abstract). The ions are present in a gradient over exchange depths greater than 100 µm (see Table 1, wherein DOL [depth of layer] of 10.7 mils is equivalent to 271.78 µm). The surface compression (surface stress of these samples is at least 30.5 kg/mm² (299.1 MPa). The chemically strengthened glasses of Table 1 are prepared using a starting glass having a strain point of 581°C (see column 5, lines 50-51). Thus, all of the limitations of instant claims 15-16, 25, 27, 33, 35, 41, and 43 pertaining to the glass pane are met by Forker.

Claims 15-16, 25, 27, 33, 35, 41, and 43 differ from Forker because Forker does not specify a use for the glass pane, and thus does not teach a cooker or oven comprising a door comprising said plane. However, it would have been obvious to one

of ordinary skill in the art to modify Forker in view of Craver in order to use the Forker glass pane in a door for an oven and cooker because Craver teaches that panes in such doors are advantageously made from strengthened glass (see Abstract and column 5, lines 30-34). One would have been motivated to use the Forker glasses in such an application because doing so would provide a commercially viable use for the Forker glasses; Forker does not teach any specific applications for the glasses of the patent, thus motivating one to look elsewhere for uses of chemically strengthened glass panels. One would have expected reasonable success using the Forker glasses in an oven door because Craver specifically teaches that tempered glasses are preferred in said doors. Therefore, claims 15-16, 25, 27, 33, 35, 41, and 43 are obvious and not patentably distinct over the prior art of record.

Regarding **claims 17-18**, Craver teaches that the oven of which the door is a part can be a wood burning stove, which is a pyrolytic oven.

Regarding **claims 22-24, 30-32, and 38-40**, as discussed above, Forker teaches chemically strengthened glasses meeting the compositional and property limitations of instant claims 15-16. Forker does not specify the interdiffusion coefficients of the glasses at 400°C and 490°C. However, because the Forker glasses are compositionally and structurally equivalent to the glasses of claims 22-24, 30-32, and 38-40, and because they have equivalent strain points (which are compositionally dependent properties in much the same way as interdiffusion coefficients), the glasses would inherently have interdiffusion coefficients at the two temperatures that would meet the

limitations of the claims. Thus, all of the limitations of instant claims 22-24, 30-32, and 38-40 are met by the teachings of Forker.

Regarding **claims 26, 34, and 42**, as discussed above, the Forker glasses contain Na^+ and/or K^+ ions.

Regarding **claims 28, 36 and 44**, Forker teaches that the alkali ion-containing glasses are made into panels (panes) having thicknesses of 0.085" and 0.105" (see Table 1). These thicknesses are equivalent to 2.159 mm and 2.667 mm.

Regarding **claims 29, 37, and 45**, the claim differs from Forker as applied above because no specific example is taught where the glass is made into a pane having a thickness of 2.8-5 mm. However, as also discussed above, thicknesses of 2.667 mm are taught. The thickness of a glass pane depends on its intended use and is thus a result effective variable. One of ordinary skill in the art would have known and understood techniques for making the Forker glasses into panes of a desired thickness, and would have had motivation for doing so from the need for a pane having a thickness between 2.8 and 5 mm. Thus, a pane having a thickness of 0.133 mm greater than the example taught by Forker would be obvious to one of ordinary skill from the Forker teachings. Claim 11 is therefore not patentably distinct over the prior art of record.

Response to Arguments

5. Applicant's arguments filed 02/24/2010 have been fully considered but are not persuasive.

Applicant argues that one of ordinary skill would not have used the Forker glass in the Craver furnace door, contending that the Forker glass is not a "conventional" glass that Craver teaches for the furnace door panel. Applicant further asserts that the Forker glass is designed for automotive applications.

Both of these contentions are not persuasive. The argument that the Forker glass is not "conventional" is based on the assertion that a "conventional" tempered glass does not contain a high amount of alumina, but rather contains less than 1% alumina. However, this definition of what a "conventional" tempered glass comprises is found nowhere in the Craver reference but is instead found in a website unrelated to the Craver invention, or furnaces at all. Instead, applicant is attempted to create a definition of "conventional" that allows for the Forker glass to fall outside of said definition and thus not meet the prescription of the Craver patent. Applicant's mere assertion that the Forker tempered glasses are not "conventional" and thus would not be used by one as the tempered glass called for by Craver is not persuasive given that the Forker glasses are soda-lime silicate glasses chemically tempered and showing high strength from said tempering. Thus, the Forker glasses can indeed be thought of as "conventional" tempered glasses, and would therefore be a candidate for use in the Craver furnace door. That this would have been obvious to one of ordinary skill in the art at the time the instant invention was filed remains the position of the examiner.

Regarding applicant's contention that the Forker glasses are designed only for automotive applications, this assertion is also false. While Forker does discuss the need for a tempered glass that can work in automotive window panels, the patent in no way

indicates that this is the only application for the glasses prepared according to the inventive method. Thus, there is nothing in the Forker patent that would dissuade one from using the inventive tempered glasses as the tempered glasses called for by Craver. Indeed, one of ordinary skill would have recognized the similarity in utility of an automotive tempered glass panel and a furnace tempered glass panel.

Finally, applicant presents results showing that the inventive tempered glass performs better than a comparative example glass that applicant herein deems "conventional". Applicant attempts to use these results to show that the inventive glass is advantageous over the conventional glass called for by Craver, but as discussed above and in the previous office action, Craver calls for no specific tempered glass. Thus, applicant's assertion that the glass to which the instantly claimed glasses are compared is somehow representative of the "conventional" glass called for by Craver is false and the results are not persuasive at showing the distinctness of the instant claims over the teachings of Forker in view of Craver.

Thus, the previously issued grounds of rejection are maintained for the reasons set forth above.

Conclusion

6. All the pending claims are rejected.
7. Applicant's arguments are not persuasive, and the previously issued grounds of rejection are maintained. Therefore, **THIS ACTION IS MADE FINAL.**
8. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NOAH S. WIESE whose telephone number is (571)270-3596. The examiner can normally be reached on Monday-Friday, 7:30am-5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Noah Wiese
17 May 2010
AU 1793

/Karl E Group/
Primary Examiner, Art Unit 1793